ABSTRACT

A fabrication method of a crystallized semiconductor thin film is such that: by performing pulse irradiation of energy beams in a minute slit shape to a semiconductor thin film (5), the semiconductor thin film (5) of an region to which the energy beams are irradiated is fused and solidified over the whole area in a thickness direction so as to be crystallized, a main beam (6) and a sub beam (7), having smaller energy per unit area than that of the main beam (6), which adjoins the main beam (6), being irradiated to the semiconductor thin film (5).